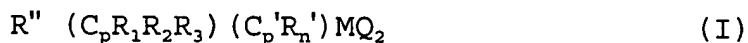


ABSTRACT

USE AND PRODUCTION OF POLYPROPYLENE

Use of isotactic polypropylene homopolymers or copolymers in processes in which the polypropylene solidifies from a melt, wherein for enhanced speed of solidification of the polypropylene the polypropylene has a melt temperature and a crystallisation temperature not more than 50° less than the melt temperature resulting from the polypropylene having been produced using a metallocene catalyst component having the general formula:



wherein C_p is a substituted cyclopentadienyl ring; C_p' is a substituted or unsubstituted fluorenyl ring; R'' is a structural bridge imparting stereorigidity to the component; R_1 is a substituent on the cyclopentadienyl ring which is distal to the bridge, which distal substituent comprises a bulky group of the formula XR^*_a in which X is chosen from Group IVA, and when $a=3$ each R^* is the same or different and chosen from hydrogen or hydrocarbyl of from 1 to 20 carbon atoms, or when $a=2$ one R^* is chosen from hydrogen or hydrocarbyl of from 1 to 20 carbon atoms and the other different R^* is chosen from a substituted or unsubstituted cycloalkyl where X is a carbon atom in the

cycloalkyl ring, R_2 is a substituent on the cyclopentadienyl ring which is proximal to the bridge and positioned non-vicinal to the distal substituent and is hydrogen or of the formula $YR\#_3$ in which Y is chosen from Group IVA, and each $R\#$ is the same or different and chosen from hydrogen or hydrocarbyl of 1 to 7 carbon atoms, R_3 is a substituent on the cyclopentadienyl ring which is proximal to the bridge and is a hydrogen atom or is of the formula $ZR\$_3$ in which Z is chosen from Group IVA, and each $R\$$ is the same or different and chosen from hydrogen or hydrocarbyl of 1 to 7 carbon atoms, each R'_n is the same or different and is hydrocarbyl having 1 to 20 carbon atoms in which $0 \leq n \leq 8$; M is a Group IVB transition metal or vanadium and each Q is hydrocarbyl having 1 to 20 carbon atoms or is a halogen.